

IN THE CLAIMS

Please amend the claims as follows:

Please cancel claims 4, 5, and 15 to 24 and substitute new claims 25 to 37.

Claims 1-24 (Cancelled)

25. (New) An atomizer for the electrostatic series coating of workpieces, comprising:

an outer housing formed of an insulating material including a longitudinal axis, an end portion and an axial tube extending through said end portion receiving conductive coating material;

a cone-shaped spray head rotatably supported by said housing in said longitudinal axis opposite said tube;

a ring part formed of an insulating material surrounding said housing in engagement with said housing preventing overspray of coating material from being received between said ring part and said housing having a generally radial end portion spaced rearwardly from said end portion of said housing; and

an electrode arrangement embedded in said ring part connected to a high voltage supply having an end extending through said generally radial end of said ring part concentric with said spray head and spaced rearwardly from said end portion of said housing and said spray head externally charging conductive coating sprayed by said spray head through ionization of air surrounding said spray head.

26. (New) The atomizer as defined in claim 25, wherein said electrode arrangement comprises a plurality of needle-shaped electrodes equally circumferentially spaced in said ring part each having a tip portion extending through said generally radial end portion of said ring part.

27. (New) The atomizer as defined in claim 26, wherein said tip portion of said electrodes are substantially flush with said generally radial end portion of said ring part.

28. (New) The atomizer as defined in claim 26, wherein said electrodes are connected to a common annular conductor located within said outer housing.

29. (New) The atomizer as defined in claim 25, wherein said ring part forms an outer wall of said housing.

30. (New) The atomizer as defined in claim 25, wherein said housing includes a radial portion spaced rearwardly of said end portion having a second electrode arrangement embedded in said housing including an end portion extending through said generally radial portion spaced forwardly of said electrode arrangement.

31. (New) The atomizer as defined in claim 25, wherein said electrode arrangement has an outer diameter less than twice an outer diameter of said cone-shaped spray head.

32. (New) An atomizer for the electrostatic series coating of workpieces, comprising:

an outer housing formed of an insulating material including a longitudinal axis, an end portion and an axial tube extending through said end portion receiving conductive coating material;

a cone-shaped spray head rotatably supported by said housing in said longitudinal axis opposite said spray head;

a ring part formed of an insulating material surrounding said housing in engagement with said housing preventing overspray of coating material from being received between said ring part and said housing having a generally radial end portion spaced rearwardly from said end portion of said housing; and

a plurality of equally circumferentially spaced needle-shaped electrodes embedded in said ring part each having a tip portion extending through said generally radial end portion of said ring part concentric with said spray head and spaced rearwardly from said end portion of said housing and said spray head connected to a high voltage supply externally

charging coating materials sprayed by said spray head by ionization of air surrounding said housing.

33. (New) The atomizer as defined in claim 32, wherein said tip portion of said electrodes are substantially flush with said generally radial end portion of said ring part.

34. (New) The atomizer as defined in claim 32, wherein said electrodes are connected to a common annular conductor located within said outer housing.

35. (New) The atomizer as defined in claim 32, wherein said ring part forms an outer wall of said housing.

36. (New) The atomizer as defined in claim 32, wherein said housing includes a generally radial portion spaced rearwardly of said end portion and forwardly of said ring part including a second plurality of equally circumferentially spaced needle-shaped electrodes embedded in said housing portion each having an end portion extending through said generally radial portion of said housing spaced forwardly of said plurality of equally circumferentially spaced needle-shaped electrodes.

37. (New) The atomizer as defined in claim 32, wherein said plurality of equally circumferentially spaced needle-shaped electrodes has an outer diameter less than twice an outer diameter of said cone-shaped spray heads.